

I claim:

- 1) A non-contact ink jet print head nozzle plate surface cleaning method, comprising steps of:
  - a) providing an ink jet print head with a nozzle plate having an open surface with major and minor dimension, and at least one linear array of ink ejecting nozzles substantially spanning said major dimension;
  - b) providing an arrangement having sidewalls and a bottom and where at least one of said sidewalls is parallel to said array of ink ejecting nozzles, said sidewall having a pressurized air conducting channel and an air exit slit exceeding said nozzle plate major dimension;
  - c) supplying a pressurized air stream exceeding through said slit in said sidewall and hitting at an angle said nozzle plate surface;
  - d) providing ink and debris collecting means being in communication with said arrangement bottom, and
  - e) cleaning said jet print head nozzle plate surface by scanning said open surface with said pressurized air stream and collecting the ink residue and debris by said ink and debris collecting means.
- 2) A method as claimed in claim 1 and wherein said scanning is part of a regular scanning pass.
- 3) A method as claimed in claim 1 and wherein said scanning is part of a scheduled scanning pass.
- 4) A method as claimed in claim 1 and wherein the length of said air exit slit is equal or larger than said nozzle plate surface major dimension parallel to said air exit slit.
- 5) A method as claimed in claim 1 and wherein said ink jet print head has a two-dimensional nozzle array.
- 6) A method as claimed in claim 1 and wherein each section of said pressurized air stream cleans appropriate nozzle only of a nozzle array.

- 7) A method as claimed in claim 1 and wherein said angle at which pressurized air stream is hitting said nozzle plate surface is less than 90 degrees.
- 8) A method as claimed in claim 1 and wherein said ink and debris collecting means are disposable means such as sponge, cloth and similar.
- 9) A method as claimed in claim 1 and wherein said ink and debris collecting means is a drain.
- 10) A non-contact ink jet print head nozzle plate surface cleaning method, comprising steps of:
  - a) providing an ink jet print head with a nozzle plate having an open surface and at least one linear array of ink ejecting nozzles;
  - b) providing a vacuum suction arrangement, being capable of moving along said nozzle plate surface of said print head;
  - c) supplying a vacuum for removing excessive amounts of ink said nozzle plate surface;
  - d) providing an arrangement having sidewalls and a bottom and where at least one of said sidewalls is parallel to said array of ink ejecting nozzles, said sidewall having a pressurized air conducting channel and an air exit slit;
  - e) supplying a pressurized air stream exceeding through said slit in said sidewall and hitting at an angle said nozzle plate surface;
  - f) providing ink and debris collecting means being in communication with said arrangement bottom, and
  - g) cleaning said jet print head nozzle plate surface by scanning said open surface with said vacuum suction and said pressurized air stream and collecting the ink residue and debris by said ink and debris collecting means.